



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,778	12/11/2003	Mark Anthony Sieverding	DN2003201	8958

27280 7590 04/03/2006

THE GOODYEAR TIRE & RUBBER COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT 823  
1144 EAST MARKET STREET  
AKRON, OH 44316-0001

EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/733,778

Applicant(s)

SIEVERDING ET AL.

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) 18-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/11/03; 1/9/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-17, drawn to a module for manufacturing a cured tire, classified in class 156, subclass 396.
  - II. Claims 18-21, drawn to a method of manufacturing/curing a tire, classified in class 156, subclass 111.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another and materially different apparatus such as one in which components are applied manually rather than with tire component applicators. Further, the apparatus could practice another materially different process such as effecting curing subsequent to any tire building (i.e. no applying as curing is being effected).
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. This application contains claims directed to the following patentably distinct species:
  - A: the embodiment of fig. 1;

B: the embodiment of fig. 2.

The species are independent or distinct because they represent mutually exclusive embodiments of the invention.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-8 appear to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. During a telephone conversation with Richard B. O'Planick on March 3, 2006 a provisional election was made with traverse to prosecute the invention of group I, species of fig. 2, claims 1-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Art Unit: 1733

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. Claims 5 and 9-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, no antecedent has been established for "the means for transferring".

In claim 9, lines 9-12, reference is made to a "tire curing station" comprising a pickup and transfer means, a mold and apparently a "cured tire removal station" - it however is not clear if this removal station is part of the "tire curing station" or is a separate and distinct additional "station."

In claim 12, line 1, it seems that "cure" should be "curing". Further, it is not clear how claim 12 further limits claim 9 since claim 9 already defines a curing mold "for receiving and curing the assembled tire components". If it does further limit, then clarification is required of what the claim 12 "means" correspond to (per 35 USC 112, sixth paragraph) given that the claim 12 means at present are defined as performing the same function that was defined in claim 9 as preformed by the curing mold.

A similar ambiguity is present in claim 17, lines 5-6 in referring to a "mold for curing" and a "means for curing" - in other words, since the same function is defined for

Art Unit: 1733

both claimed elements, it cannot be readily ascertained what disclosed structure corresponds to the claimed "means".

In claim 17, lines 5-7, the scope is also indefinite as it is not clear *which* claimed elements are "located between one or more component appliers" - in other words, this could be read as being in reference to only to "means for curing" or the mold for curing or also the entire "tire curing station". Clarification is required.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1733

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 17 is rejected under 35 U.S.C. 102(b/e) as being anticipated by Takagi (US 2002/0153083) or Caretta et al. (US 6,908,523).

Both Takagi (esp. fig. 21 - note location of curing station 104 along path 11 between the other applying stations such as 101 and 102) and Caretta et al. (esp. fig. 1 - note that the tire curing station 3 is located between the other applying stations 5-10) disclose manufacturing machines for tires including plural component applicators as well as a tire curing station located between the applicators, these references therefore being considered to anticipate this claim.

12. Claims 1-5, 7-13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caretta et al. (US 6,908,523) taken in view of at least one of [Black et al. (US 3,389,032), Maas (US 1,818,955) and Harsel (US 1,552,987)].

Caretta et al. (esp. fig. 1) discloses a tire building system including plural component applicators at spaced locations along a path (11), plural detachable building

Art Unit: 1733

drums ("toroidal supports") adapted to be detached/transferred between stations, and a tire curing station (3) for curing the tire while mounted on the detachable building drum (e.g. col. 14, lines 1-15), this being clearly also designed to effect curing as other tires are being built on other detachable building drums. This reference therefore teaches an apparatus/module as required by claim 1 (the term "module" not being read to define over an assembly of stations/appliers as for example in Caretta et al. in light of the disclosure as a whole) except that it does not seem to suggest mounting the drums on a mobile building trolley for movement along the predetermined patch. In particular, Caretta et al. describes broadly that devices are provided for the functional transfer of the tires being built between stations (col. 8, lines 30-36) but does not expressly disclose movable trolleys - it should be noted however that the specific teachings of using plural robotic arms are only described as a preferred form for these devices (col. 8, lines 37+).

Black et al. (note drums 50 detachably mounted on carriers), Maas (note drums mounted so as to be slidably moved along rails) and Harsel provide evidence of the well known use in this art, in the context of multi-station tire assembly, of detachable drums mounted for movement in what is considered trolley fashion along rails between the various assembly stations. Given that transfer of tire building drums among stations in tire building using trolleys is a well known and conventional way to effect such transfer, it is considered to have been obvious to effect the necessary transfer among stations as desired by Caretta et al. using drums detachably mounted to movable trolleys as claimed. Although Caretta et al. specifically disclose use of robotic arms, as already



Art Unit: 1733

noted, this reference expressly indicates that this is merely the preferred form of the necessary transfer means, it being considered that the ordinary artisan at the time the invention was made would have understood this as a suggestion that other known suitable and effective means could be used if desired for only the expected results. A module as required by claim 1 would therefore have been obvious.

As to claim 9, Caretta et al. discloses building plural tires simultaneously, this clearly requiring at least three drums and corresponding transfer means/trolleys. As to claims 2, 7, 8, 10, 15 and 16, direct extrusion to form strips that are used to form various components at the location of the applier is clearly taught. As to claims 3 and 11, the claimed components are considered to represent well known and obvious components for tires, application means for such being therefore obvious. As to claims 4, 5 and 13, note col. 14, lines 1-15 of Caretta.

13. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caretta et al. (US 6,908,523) taken in view of at least one of [Black et al. (US 3,389,032), Maas (US 1,818,955) and Harsel (US 1,552,987)] as applied above, and further in view of at least one of [Mitamura et al. (US 2002/0015746), Sumner et al. (US 4,699,578) and Northrup (US 1,566,500)].


Use of induction curing means for tires being a well known and desirable manner to heat/cure tires (Mitamura et al., Sumner et al. and Northrup are exemplary), it is considered to have been obvious to effect the cure of the tires using induction heating for only the expected results.

Art Unit: 1733

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
March 28, 2006